

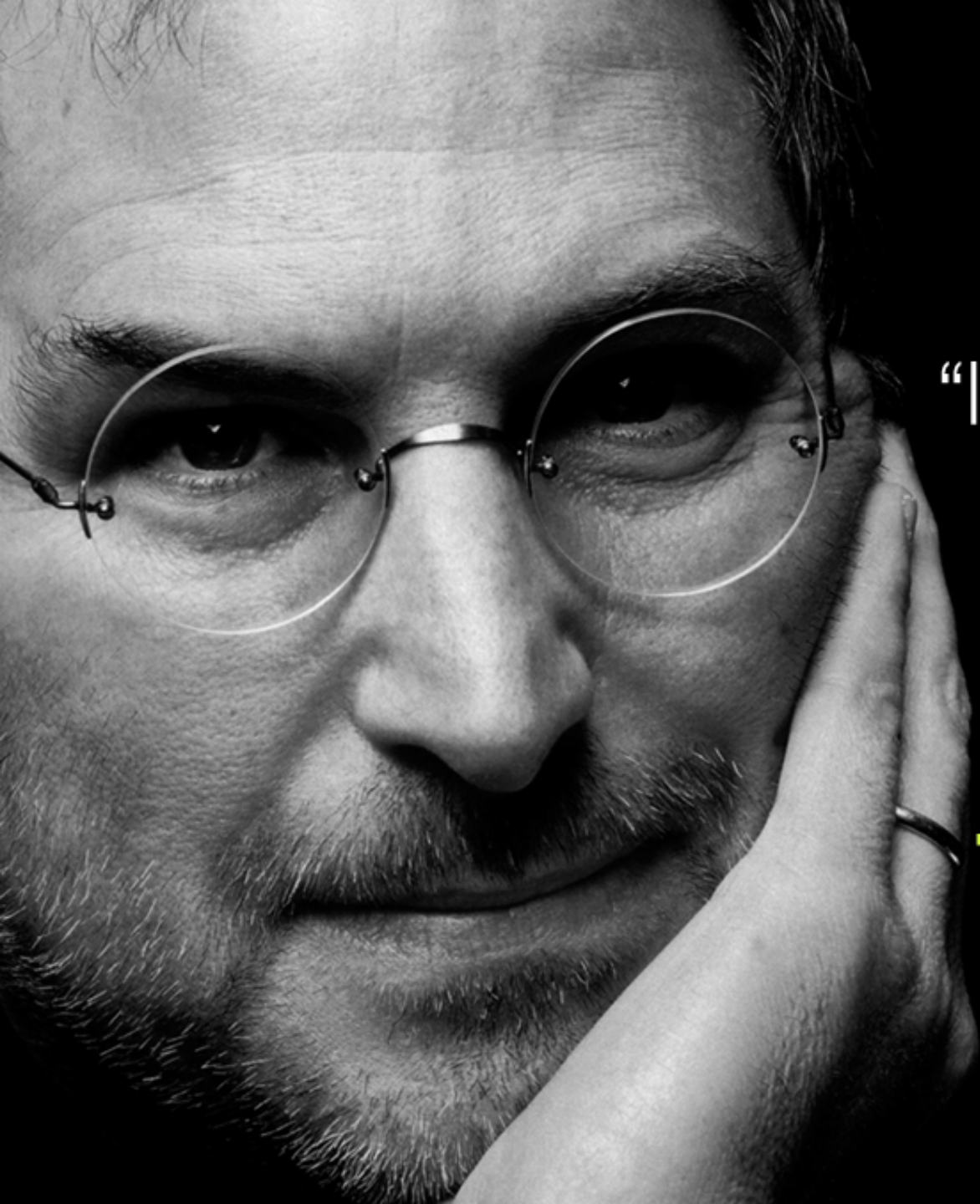


Public/Private Partnerships

Expanding the Reach of Traffic
Signals

Lynne Yocom

UDOT Fiber Optics Manager



“If you are working on something exciting that you really care about, **you don't have to be pushed.** **The vision pulls you.**”

Mission

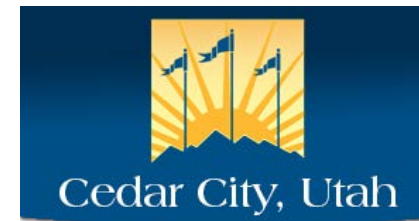
- **Innovating transportation solutions that strengthen Utah's economy and enhance quality of life.**

UDOT Strategic Goals

- **ZERO CRASHES, INJURIES AND FATALITIES**
- UDOT is committed to safety, and we won't rest until we achieve zero crashes, zero injuries and zero fatalities. ut.zerofatalities.com/
- **PRESERVE INFRASTRUCTURE**
- We believe good roads cost less, and through proactive preservation we maximize the value of our infrastructure investment for today and the future.
- **OPTIMIZE MOBILITY**
- UDOT optimizes traffic mobility by adding roadway capacity and incorporating innovative design and traffic management strategies.

UDOT Trade Partners

Cities Counties Special Services



UDOT Trade Partners

Telecoms



UDOT Trade Partners

State Agencies



DTS



UTAH AGRC



Utah Governor's Office *of*
Economic Development

BUSINESS • TOURISM • FILM

Coordinating with the Telecoms

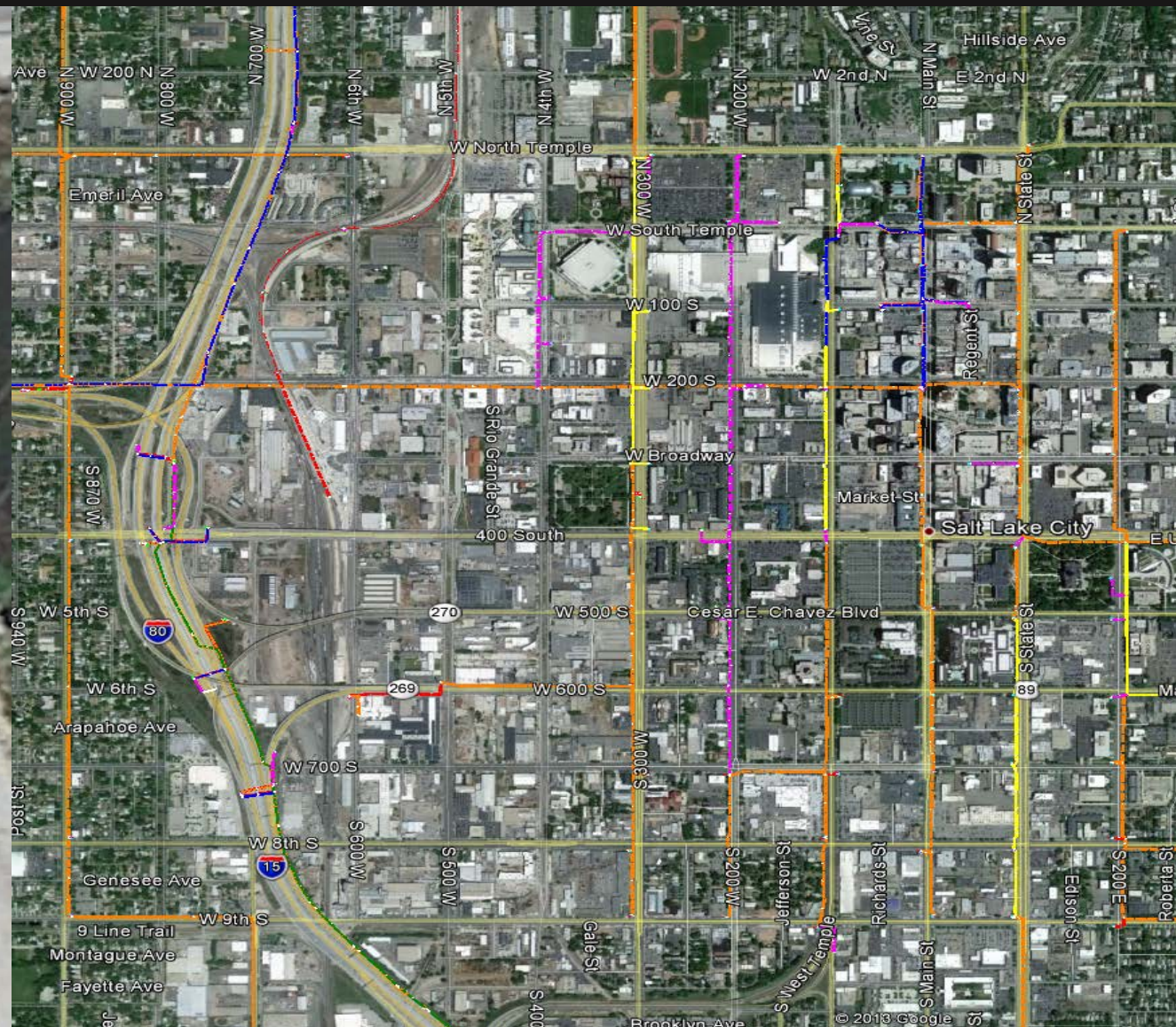
Yearly planning meeting

- Single point of contact for the state
- Telecom wish-list

Know what facilities are available in the row to help direct inquiries to the proper entities

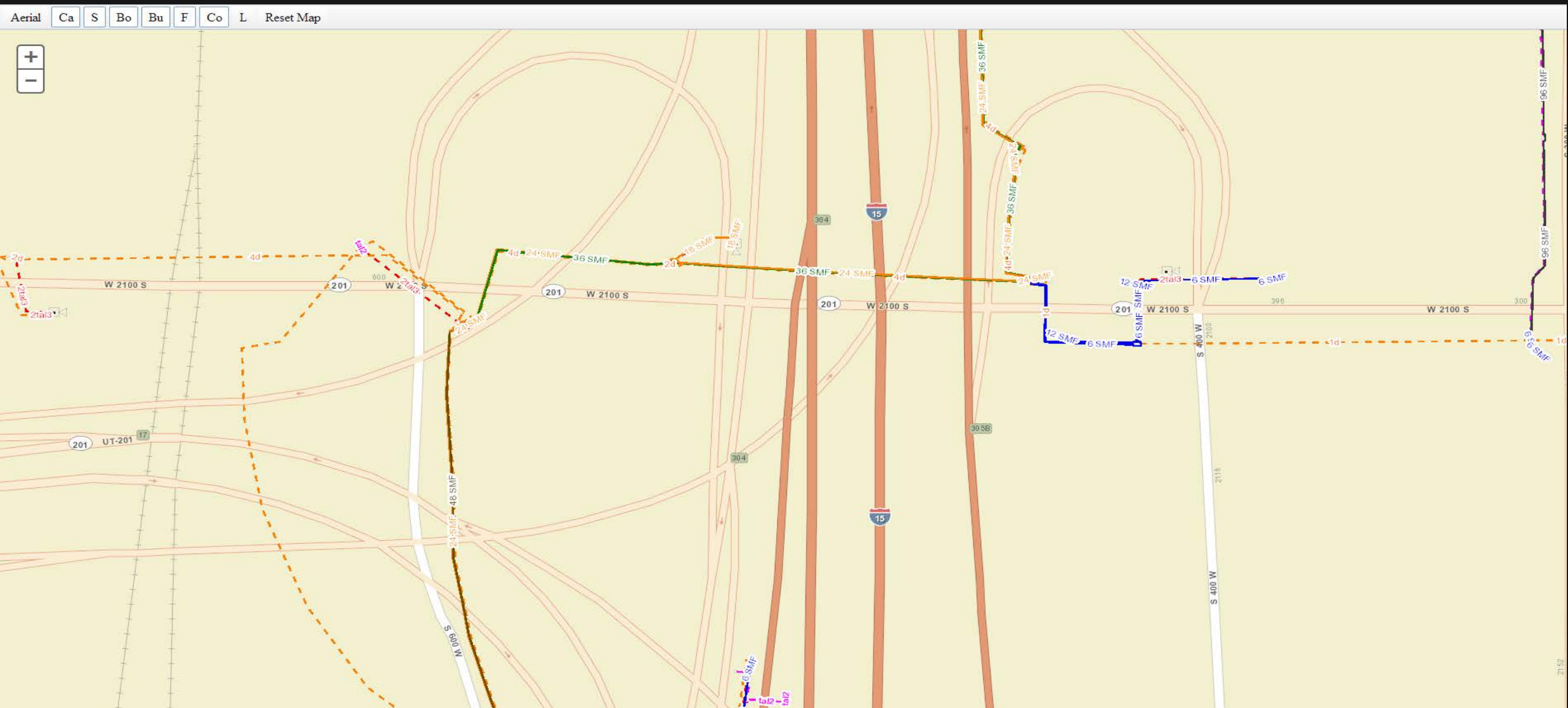
- Permits Office coordination
- ROW office coordination
- Information/Communication is key!

Fiber and Conduit Locations



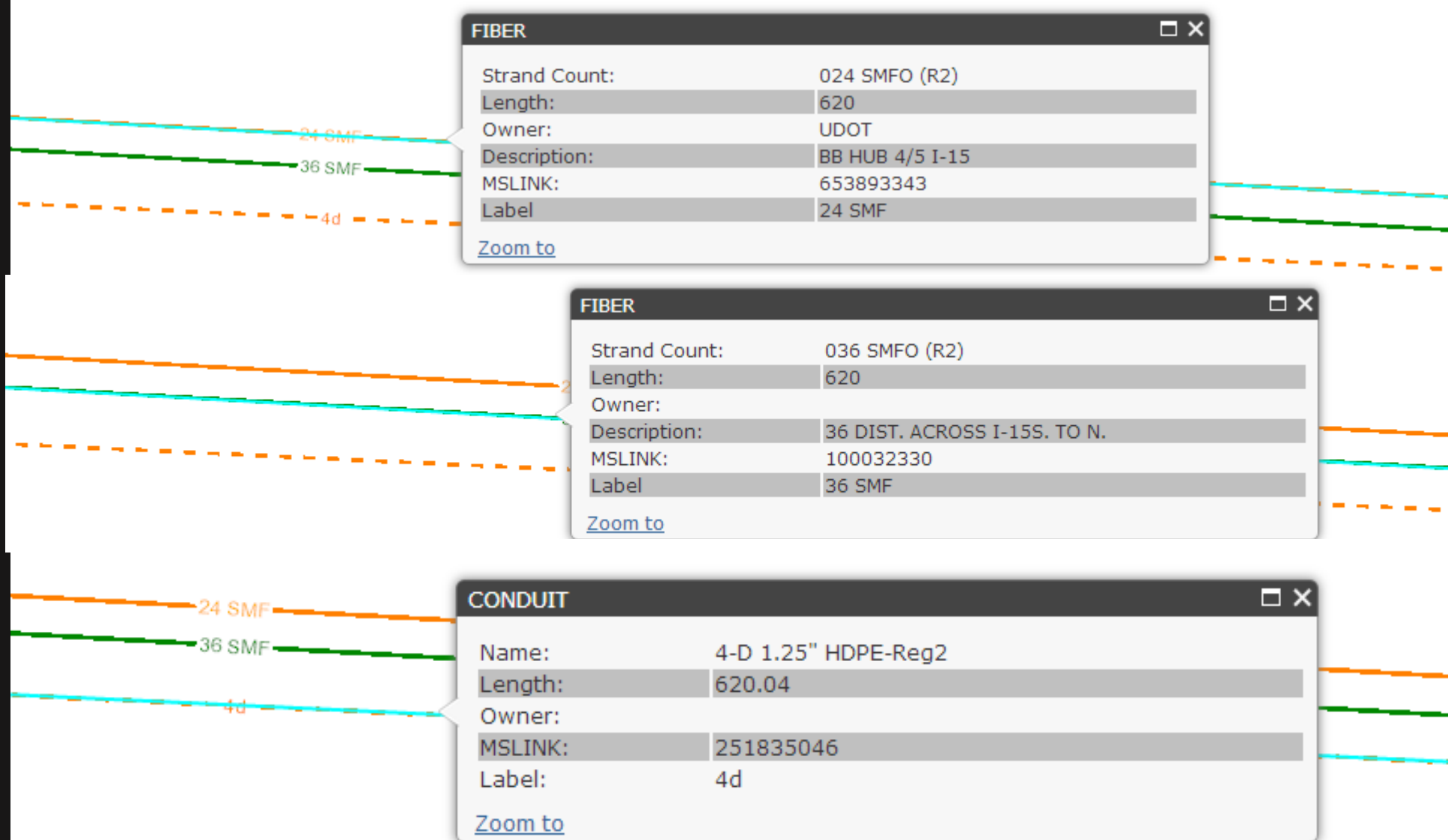
<ftp://168.178.125.70/tcudot/Fiber/KMLs/>

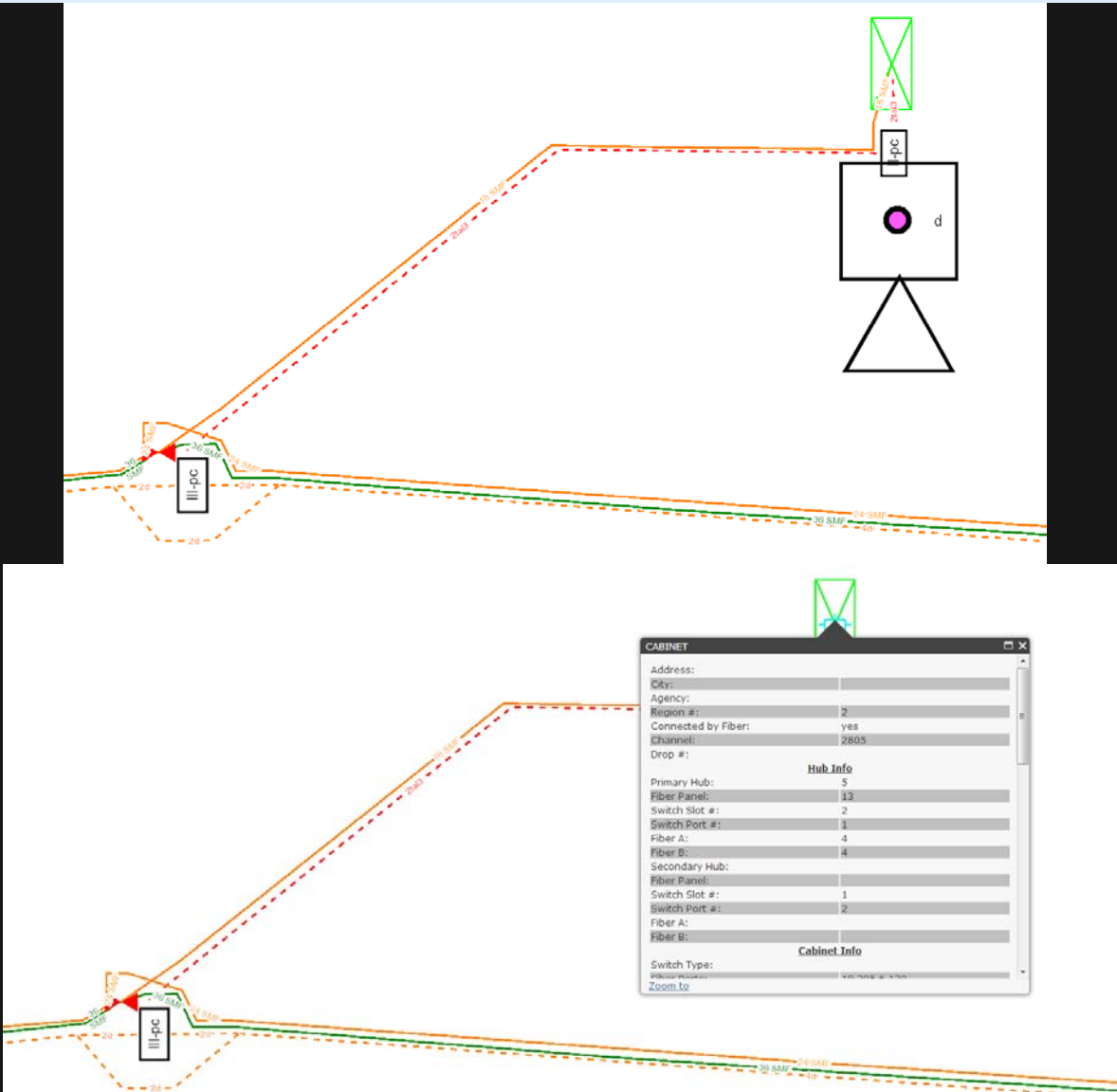
Fiber and Conduit Locations



<http://projects.horrocks.com/arcgis/udotfiber.html>

Fiber and Conduit Information





<http://projects.horrocks.com/arcgis/udotfiber.html>

Reducing Broadband Deployment Time

- **Make access to the right of ways easier.**
 - Cooperation between Federal and State Agencies
 - DOT's
 - Forest Service
 - BLM
 - School Land Trust
 - State Parks
 - National Parks
- **Open up the ROW all the time.**
 - No exclusive access to one company.

Underserved Areas Incentives

- If you build it they will come.
 - Examples
 - Scipio to Holden – CentraCom
 - Logan – Syringa
 - Heber – AllWest
 - Cottonwood Canyons - Crown Castle
- Help communities understand how to attract fiber telecom providers.
 - Let them use UDOT standards for construction.
 - Attend planning meetings help with coordination.

Recommendations On Policies

- Utah State Rules and Policy on Longitudinal Access for Telecommunications
 - http://le.utah.gov/code/TITLE72/htm/72_07_010800.htm
 - http://le.utah.gov/code/TITLE72/htm/72_07_010900.htm
 - <http://www.rules.utah.gov/publicat/code/r907/r907-064.htm>
 - <http://www.rules.utah.gov/publicat/code/r907/r907-065.htm>
 - <http://www.rules.utah.gov/publicat/code/r930/r930-006.htm>
 - <http://www.rules.utah.gov/publicat/code/r930/r930-007.htm>

Big & Little Cottonwood Canyons



The Cottonwoods

- 4 Major Ski Resorts
- 500 inches annual snowfall
- Popular recreation Year-Round

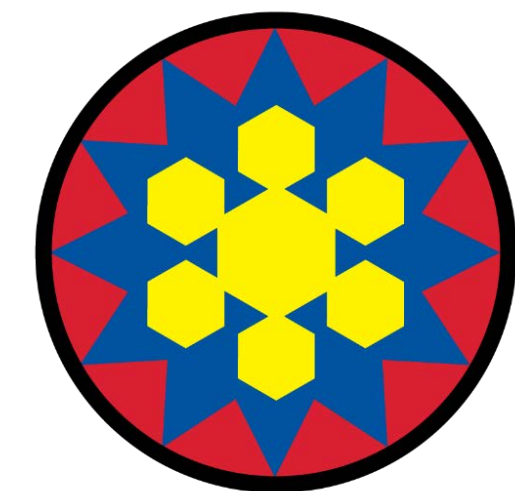


A photograph of a busy mountain road during winter. The road is covered in snow, and a long line of cars is stuck in traffic. In the background, there are snow-covered mountains and houses. A traffic light is visible in the foreground, showing a green arrow pointing up and two red lights. A blue sign above the traffic light reads 'BIG COTTONWOOD CYN' and 'FT UNION BLVD'. A blue billboard on the side of the road says 'Ready for Spring!'.

Peak traffic days are powder days.

Avalanches





Brighton
UTAH

snowbird



**SALT LAKE
COUNTY**



Solitude
MOUNTAIN RESORT



Save Our Canyons



GRANITE
COMMUNITY COUNCIL

Why Build the Cottonwoods?

- No monitoring road Conditions
- Poor communications
 - Operations groups
 - Emergency response
 - Avalanche control
 - Ski resorts and lodges
 - Everyday users

Crown Castle International

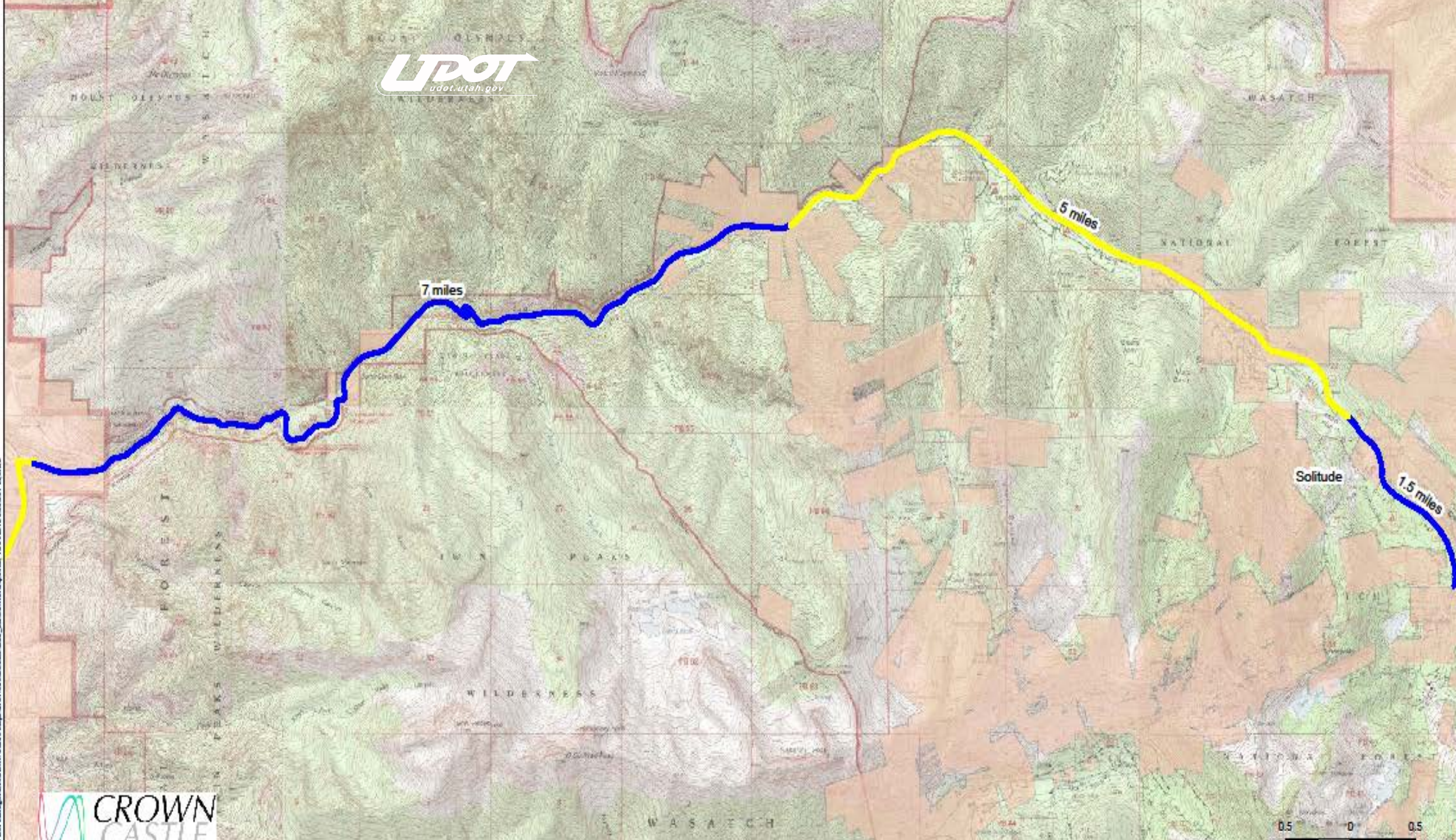
- Wireless infrastructure company
- Supports all carriers
- Proposed DAS in each canyon

Crown Castle Received

- Build Fiber-Optic Backbone in ROW
- Wireless Towers in ROW
- Use of UDOT fiber conduit
- Hub building on UDOT ROW

UDOT Received

- 24 strands on fiber cable
- Spare conduit
- Access to all poles for equipment
- RWIS Installation
- Power for devices
- Hub space for equipment



Existing UDOT Conduit



Wasatch Blvd.

4 miles



HORROCKS
ENGINEERS

2162 West Grove Parkway
Suite 400
Pleasant Grove, UT 84062
(801) 765-5100

Crown Castle Communications
Wasatch Blvd. Build - Total length 4 miles



DATE
10/31/2012
DRAWN
EHB
Figure 2

C:\E:\P\064-HU\064-Pleasant Grove Cell Map\01\Horrocks\Map\064-HU\064-Pleasant Grove Cell Map.dwg (10/31/2012 1:16:08 PM) vba

NEPA -1 Year





Design Challenges

- Granite Rock
- Bridge Attachments for Creek Crossings
- Power Availability
- Existing Utilities
- Clear Zone Obstructions

Construction Challenges

- Stakeholder involvement
- Limitations:
 - Watershed oversight
 - Trench length
 - Traffic control
 - Night work
 - Environmental controls
- Accommodation of recreational users

















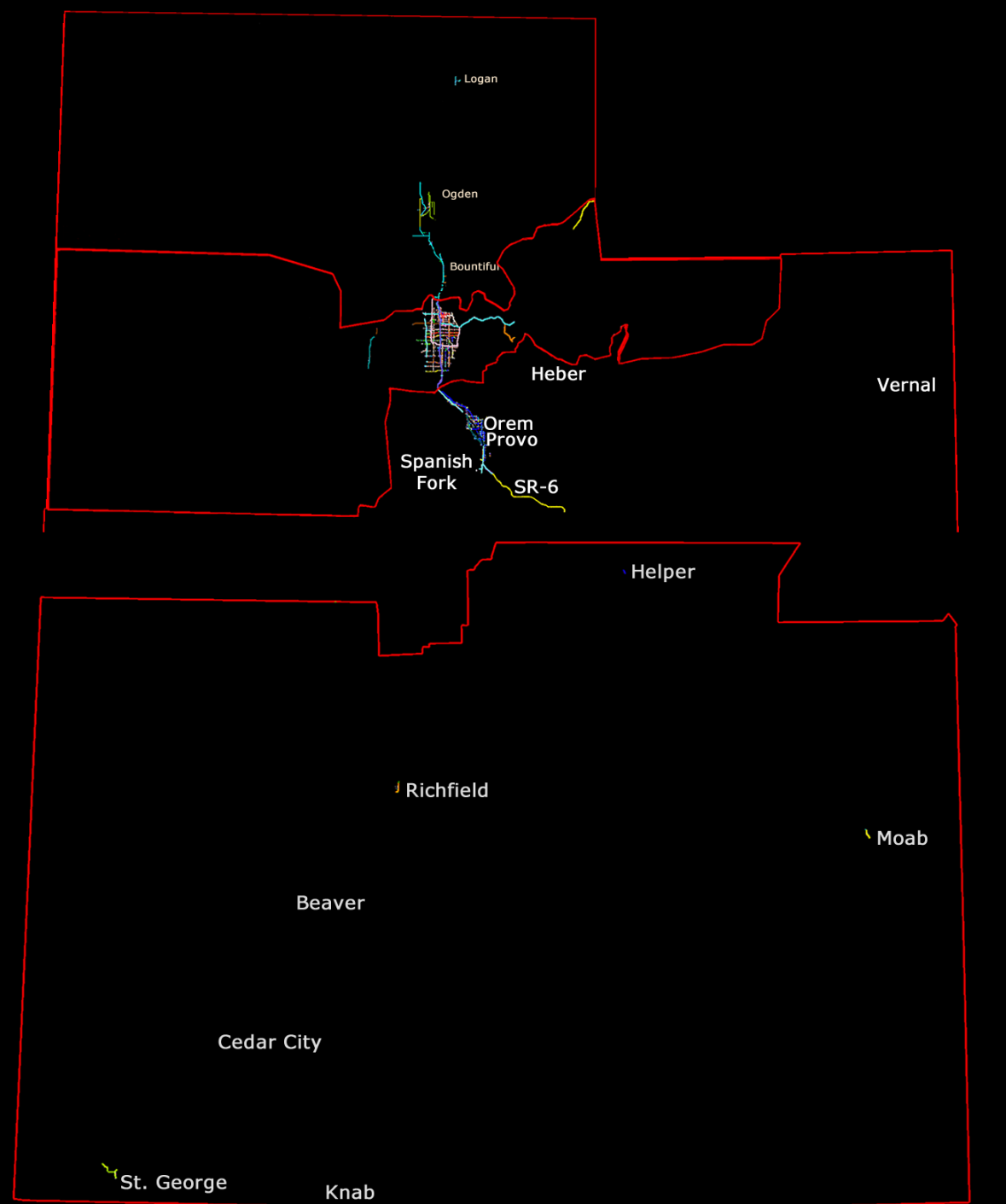
Project Summary

- Projects Estimate: \$5 Million
- 35 poles
- 24.5 Miles fiber optics
- 7200 Volt Electrical Systems
- 12 new cameras
- 8 RWIS
- 15 chain-up signs
- Improved communications for All Users
- Avalanche Operations Center
- Future ITS expansion (dms, etc.)

State 2006

UDOT
Fiber/Conduit 631
Miles Aprox.

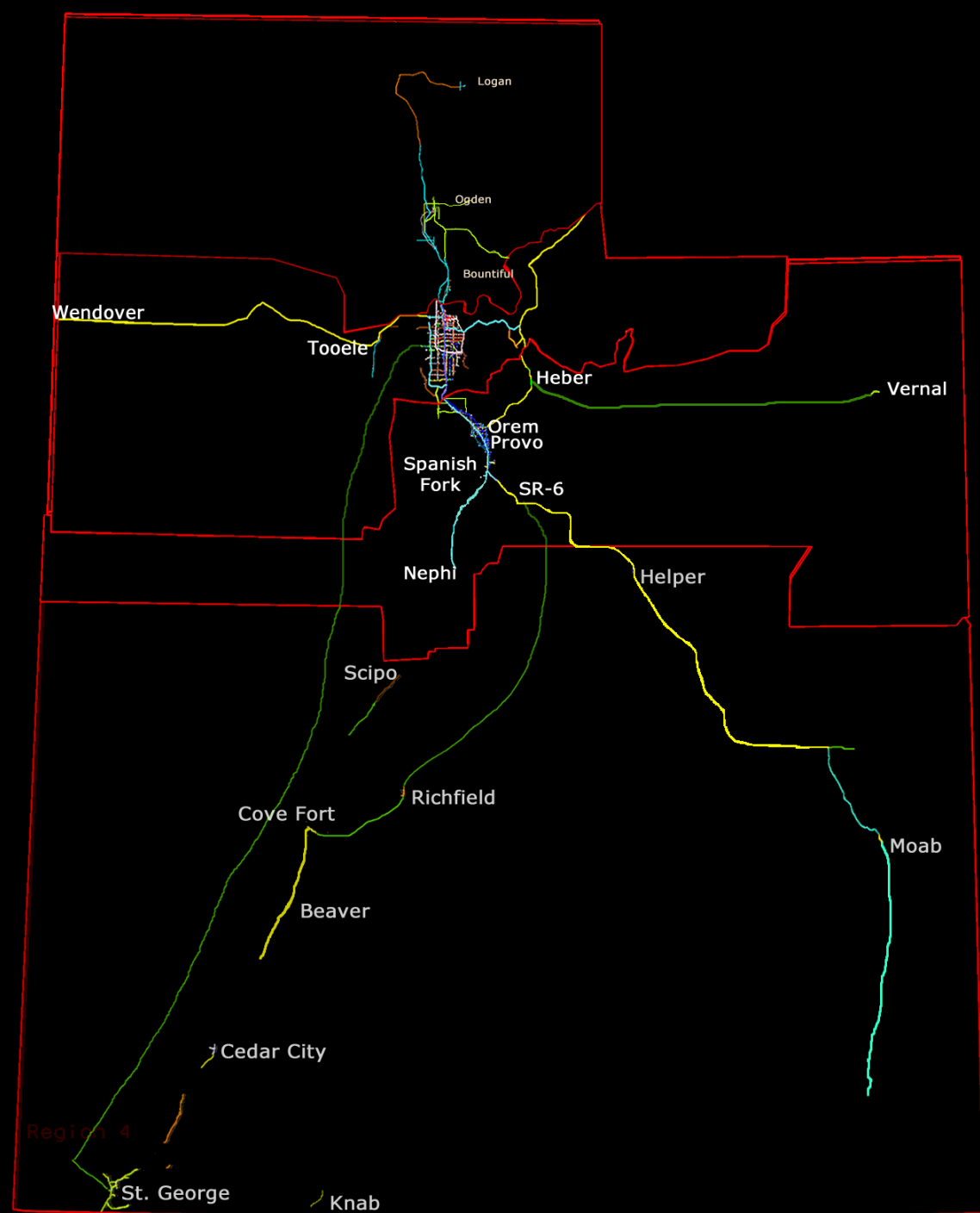
Traded
Fiber/Conduit
Circuits
100 Miles Aprox.



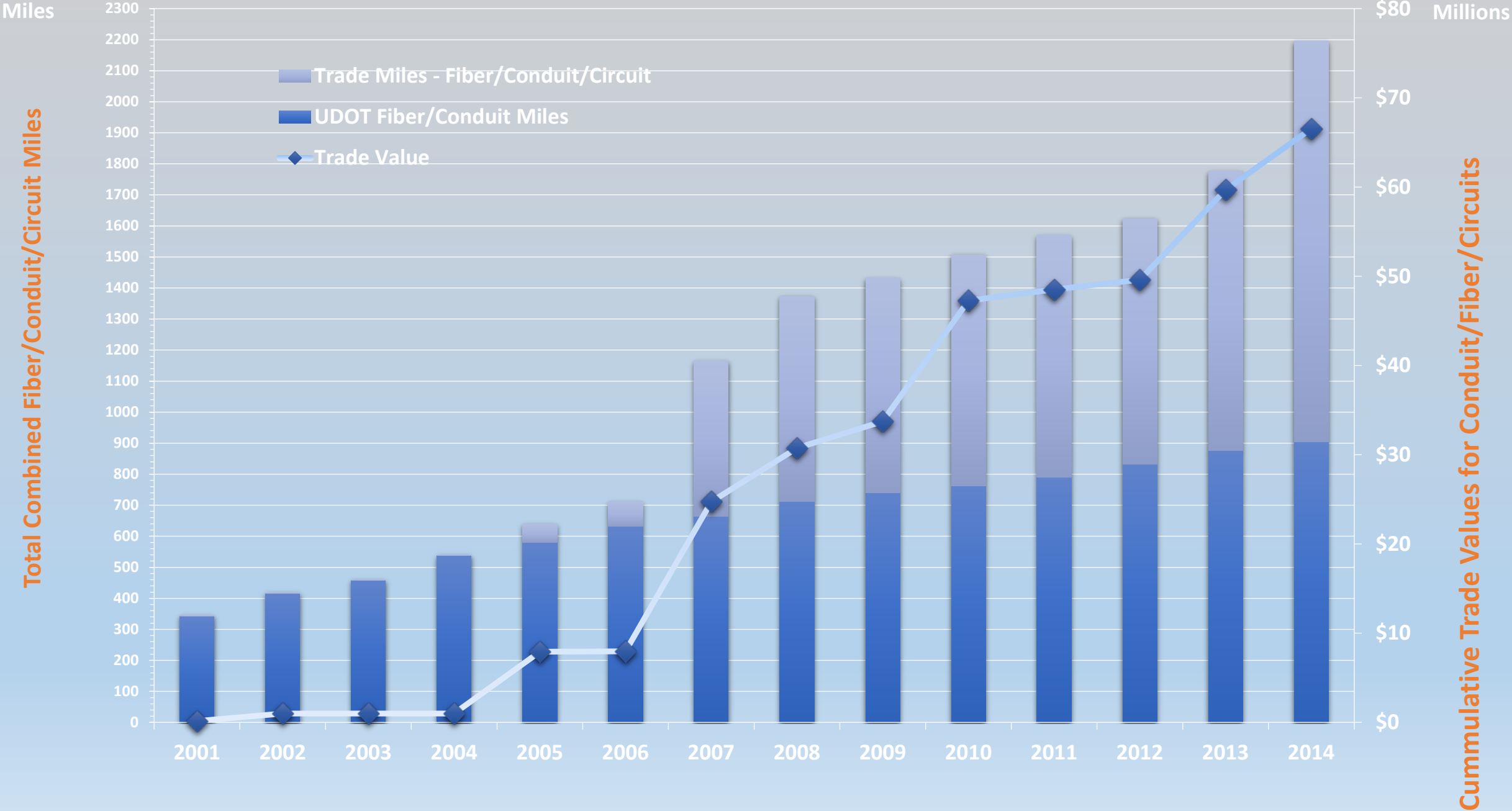
State 2015

UDOT
Fiber/Conduit 960
Miles Aprox.

Traded
Fiber/Conduit
Circuits
1000 Miles Aprox.



UDOT's Fiber Optic Network



If you want to be
incrementally better: Be
competitive. If you want to
be exponentially better: Be
cooperative.

[Unknown Source](#)

Questions?

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(801) 887-3780